Extending the Holocene survival of *Pinus sylvestris* at its southwesternmost distribution range

POSTER IN SESSION S27

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Pinus sylvestris, the most widely distributed tree in Eurasia, has currently in Spain its natural distribution limit to the south and southwest in the world. Palaeoecological data show that this species was, during the Holocene, more widely distributed in the western Mediterranean that today and that suffered a very severe contraction during the last two millennia. The prospects of sites has been extended in the province of Leon (NW Spain), close to the Cantabrian range, in areas where verbally transmitted testimonies of locals suggested the occurrence of pine forests in the historic past. The site of Pobladura de la Sierra provided 25 woody remains, as well as numerous charcoal remains, leave fragments, and barks. A new fossil population of *Pinus sylvestris* is reported, forming the westernmost continental fossil appearance of this tree during the Holocene. The implications for management, as well as those referred to other pines growing in NW Spain during the Holocene are discussed.

Nuances matter: How fossil woody remains changed the interpretation of the vegetation in Iberia

TALK IN SESSION S27

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Quaternary pollen records are used to make vegetation reconstructions that are crucial for the understanding of past climate changes and for validating palaeoclimate and paleodistribution models. However, these reconstructions from pollen data remain, due to its methodological limitations, often open. Here, we present several examples from Iberia that show how interpretations can change substantially when taking into account other complementary data sources, such as fossil woods, and that these independent data are needed to make palaeoecological reconstructions more reliable. Some studies based on macrofossils shed light on the taxonomic compositions of past vegetation assemblages, including major tree genera. The case of *Pinus* is noteworthy, as it is one of the most important genera of trees in either natural and anthropogenic vegetation in the Iberian peninsula and comprises six autochthonous species occurring in very diverse environments. Moreover, woody macrofossils can help to solve questions related with the altitudinal distribution of forests and give independent insights on how humans interacted with vegetation though their past wood acquisition strategies.

Reconstruction of dominant vegetation types and climate during the period of the Neanderthals settlement in Chagyrskaya Cave (Altai Mountains)

TALK IN SESSION S25

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This study presents the pollen records obtained from the sediments of Paleolithic site Chagyrskaya Cave located on the left bank of the Charysh River, Tigirek Range, Altai Mountains. This site same as Okladnikov Cave has yielded artifacts of the dejete type that resemble those from the Mousterian technocomplexes in Trans-Caucasus, southwestern regions of Europe and Middle Asia. Analyses of the archaeological materials from these two cave sites have led to establishing the Sibiriachikha trend that is significantly different from other trends in the Altai Middle Paleolithic. The investigations of left ulna from stratum 6a point to Neanderthal affinities. The bone is large, linking the individual with certain Near Eastern Neanderthal males such as Shanidar. Radiocarbon dating was carried out on the nine samples of collagen that was extracted from bison bones with cut marks recovered from stratum 6. The dates generated on the samples from strata 6b and 6c/1 fall within the interval of 52–54 kyr BP and >52 kyr BP. This period corresponds to the terminal MIS4 that was confirmed by geologi-